

REMARKS

Telephone Interview Summary

Applicants wish to thank Primary Examiner Robin Hylton for her time and effort during a first telephone conversation with Applicants' attorney Thomas Feix, on January 12, 2007 and a second telephone conversation on February 26, 2007. During the first conversation, the following items were discussed: the Final Office Action dated November 12, 2006, the Ogura et al. reference (US 6,513,659), the Domke reference (US 5,326,176), and possible amendments to the claims that are included in this response. During the second conversation the reasons for non entry of the After Final Amendment submitted on 22 January 2007 as described in note 3 of the Advisory Action dated 8 February 27, 2007 were discussed.

The Pending Claims

Currently pending are claims 1, 3-9, 12-17, 19-27 and 30. By this response, claims 1, 17, 27 and 30 are amended and claims 18, 28 and 29 are canceled. Reconsideration of the pending claims is respectfully requested.

Summary of the Office Action

The Office Action dated November 22, 2006 made FINAL the restriction requirement set forth in the previous action. The Office Action also maintains the rejection of claims 1-27 and 30 under 35 USC §103(a) as being unpatentable over Ogura in view of Domke (US 5326176).

Amendments to the Claims

Claims 28 and 29 directed to the non-elected invention have been canceled without prejudice to filing a divisional application thereon. Claim 18 has also been canceled by this response. It is noted that the substance of claim 18 was previously incorporated into claim 17 as amended in the response filed on 30 August 2006.

Claims 1, 17, 27 and 30 have been amended to point out and more particularly and claim more distinctly the subject matter of the invention. Specifically, claim 1 drawn to the valve element comprising two components including a base element of flexible material and a

membrane of semi-rigid material has been amended to recite that the base element includes “a second side for attaching to a flexible sidewall of a packaging enclosure.” As was discussed with the Examiner, claim 1 as amended more particularly points out the use of the valve and the packaging material to which it is attached. Support for the added use limitation of the valve element with flexible packaging is described in the specification at numbered paragraph 37 and is shown in several of the drawing figures.

Claim 17 drawn to a package including the two component valve element of claim 1 has been amended to incorporate the flexible first sidewall limitation of claim 27. In preparation of this response, applicant noted that claim 17 erroneously recites that the base element is attached to the “first” sidewall when it should be the “second” sidewall. This has been corrected. Claim 27 has been amended to be consistent with amended claim 17 and to correct for the 112, paragraph 3 objection noted in the Advisory Action dated 8 February 27, 2007. Claim 30 directed to a package containing a single component valve element including a membrane has been amended to recite that the second sidewall of the packaging enclosure comprises a flexible material. No new matter is added by the current amendments to the claims.

Discussion of the Claim Rejections

Claims 1-27 and 30 stand rejected under 35 USC §103(a) as being obvious over Ogura et al. (US 6,513,659) in view of Domke (US 5,326,176).

A summary of the points raised by the Primary Examiner’s in the 103 rejection are listed below:

1. Ogura teaches a valve element comprising a membrane having a domed central portion which has a first position to obstruct fluid communication through an aperture and a second position to allow fluid communication through an aperture. The Primary Examiner acknowledges that Ogura is silent regarding a base element.

2. Domke teaches a valve element for selectively facilitating fluid communication wherein the valve element either includes or does not include a base element attached to a border of the membrane, the base element including a seat portion and an aperture.

3. Domke teaches the base element may be formed of PVC material (a rigid material as previously noted by applicant), but is not limited to PVC.

4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of a base element to the valve of Ogura. Doing so is a known alternative valve structure that will also allow for selective fluid communication therethrough and will maintain the valve on the packaging without worry of inadvertent complete or partial removal of the valve.

5. Ogura as modified discloses the claimed invention except for the membrane comprising a semi-rigid material and the base element of a flexible material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the membrane of a semi-rigid material and the base element of a flexible element, since it has been held to be within the general skill of a work in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

6. The material of the valve membrane and the base element are subject to the use of the valve as well as the packaging to which it is attached. Thus, the material used to manufacture the valve and valve seat would have been a matter of obvious design choice to one of ordinary skill in the art at the time the invention was made, since it appears the material choice would work equally well as applicant's claimed device.

In response, Applicant offers the following counter arguments on the cited references and use of the valves and the materials for the valve membrane, base element as well as the packaging on which the valves are attached.

Ogura is directed to a valve for use on a vacuum container comprising a tub and lid. The valve is attached to the lid. Ogura teaches that the tub and lid are formed of *rigid* materials. Ogura further teaches that the lid can be made of metal, glass, plastic (see col. 4, lines 64-65) and the lid must be sufficiently thick or include ribs to prevent deformation of the lid (see col. 5, lines 3-4). Ogura discloses a valve element that comprises a gas non-permeable sheet of **flexible** material that is preferably an elastic material having an elastic recovering property, by which a

flat state and a curved deformation state can be alternately repeated (see col. 5, lines 8-15). Further, and as described in Example 1 beginning at col. 10, line 28, Ogura teaches that the sheet 6 is prepared from a silicone rubber sheet having a thickness of 1.5mm. From the above it is clear that Ogura does not teach or suggest a membrane that comprises a semi-rigid material as claimed in independent claims 1, 17, and 30.

In summary, Ogura's valve is intended for use on a rigid vacuum container. Ogura teaches a flexible membrane and not a semi-rigid membrane as required by the claims and Ogura fails to teach a base member since a base member would be redundant structure for a valve on a rigid vacuum container.

Domke is directed to an overpressure valve for use on flexible packaging. Domke discloses that membrane 10 is a transparent flexible foil (col. 2, line 12-13). In the case where the package wall on which the valve is attached has little rigidity, so that uncontrollable strains are transmitted to the membrane, Domke teaches to use a base plate 31 comprising polyvinyl chloride (PVC) or a similar material having a thickness of 150-250 μm . (col. 4, lines 15-24). As noted previously, PVC is a tough and strong material of high tensile strength and PVC is not considered a flexible material, especially at a thickness of 150-250 μm . In summary, Domke discloses a valve for use on flexible packaging and the valve may include a flexible membrane and a rigid base plate.

Applicant's counter argument to point 4 is as follows. It would not be obvious to apply the teaching of a base element of Domke to the valve of Ogura for the reason made by the Primary Examiner point 6. Ogura is directed to a valve for use on a **rigid** vacuum container. Ogura fails to disclose a base element, much less a rigid base element as called for in Domke, for the simple reason that any kind of base element is unnecessary and/or redundant structure for the intended vacuum container application of Ogura. The rigid base element of Domke is unnecessary in the valve of Ogura since the vacuum container lid itself provides the rigid seat against which the flexible membrane acts.

Applicant's counter argument to point 5 is as follows. It would not have been obvious to form Ogura's membrane of a semi-rigid material and the base element of a flexible element because such a selection of materials would not be suitable for its intended use of the Ogura valve. As noted previously, the intended use of the Ogura valve is for attachment on a **rigid** vacuum container. There is no motivation or suggestion in Ogura to use a membrane made of a semi-rigid material, nor is it a matter of obvious design choice since a semi-rigid membrane would require a much higher level of vacuum to inwardly deflect the membrane into a concave or closed configuration. The sealing integrity of a vacuum container is only as good as the weakest or most flexible sealing element such that high levels of vacuum force would be undesirable. Therefore the increase in vacuum force that would be necessary to deflect a semi-rigid valve membrane could result in leak issues in the gasket seal 4 disposed at the tub and lid interface. Further, once the vacuum to the container is released, a semi-rigid membrane would tend to remain in the concave or closed configuration until the user either manually forces the valve into a convex or open configuration or an overpressure is applied to the container to "pop" the semi-rigid membrane into the curved upward or open configuration. Neither situation is contemplated by Ogura. Ogura is already concerned about designing the lid to be sufficiently rigid in order to resist deformation. Use of a semi-rigid membrane would only increase cost and complexity in the vacuum container design. Lastly, the inclusion of a flexible base member in a valve for use on a rigid vacuum container is superfluous, even if the valve membrane were formed of a semi-rigid material.

As discussed with the Primary Examiner during the telephone conversation on January 12, 2007, applicants have amended the independent claims 1, 17, and 30 to point out the intended use of applicant's valve for use on a flexible sidewall of a packaging container. This intended use was contained in the claims as originally filed (see, for example the recitation of the flexible sidewall feature in original claim 27) and therefore raises no issues that require an additional search.

In view of the amendment to independent claims 1, 17, and 30 and the above remarks, it is believed that the prior art rejection of these claims is overcome and should be withdrawn. Claims dependent upon a claim that is not anticipated by a reference cannot be rejected under 35

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U.S.C. § 102 and claims dependent upon a claim that is not obvious cannot be rejected under 35 U.S.C. § 103. See, e.g., *RCA Corp. v. Applied Digital Data Systems*, 221 U.S.P.Q.2d 385 (Fed. Cir. 1984); *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Since the cited references do not render independent claims 1, 17, and 30 obvious, dependent claims 3-9, 12-16, and 19-27 are likewise patentable.

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Conclusion

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

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Respectfully submitted,



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